UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

RATE SCHEDULE P-98[1]
WHOLESALE RATES FOR
HYDRO PEAKING POWER

Effective:

As of January 1, 1998, and thereafter in accordance with Rate Order No. SWPA-37.

Available:

In the marketing area of Southwestern Power Administration (Southwestern), described generally as the States of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas.

Applicable:

To wholesale Power Customers which have contractual rights from Southwestern to purchase Hydro Peaking Power and associated energy (Hydro Peaking Power, Peaking Energy, and Supplemental Peaking Energy, respectively).

Character and Conditions of Service:

Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage(s), at the points of delivery, and in such quantities as are specified by contract.

Definitions of Terms:

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purpose of power accounting is the 60-minute period which begins with the change of hour. The term "*peak demand*" means the highest rate of delivery, in kilowatts, for any Demand Period during a particular month, at any particular point of delivery.

For the purposes of this Rate Schedule P-98, the term "*point of delivery*" is used to mean either a single physical point at which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of points is computed as the coincidental highest rate of delivery among the specified points rather than as the sum of peak demands for each individual physical point of delivery.

The term *"Peaking Contract Demand"* means the maximum rate in kilowatts at which Southwestern is, by contract, obligated to deliver Peaking Energy during any Demand Period. Unless otherwise provided by contract, the *"Peaking Billing Demand"* for any month shall be equal to the "Peaking Contract Demand."

"Ancillary Services" are those services necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the System of Southwestern in accordance with Good Utility Practice.

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[1] Supersedes Rate Schedules P-90A, P-90B, and F-90B

"Scheduling, System Control, and Dispatch Service" (an Ancillary Service) is provided by Southwestern as Control Area operator and is in regard to interchange and load-match scheduling and related system control and dispatch functions.

"Reactive Supply and Voltage Control from Generation Sources Service" (an Ancillary Service) is provided at transmission facilities in the System of Southwestern to produce or absorb reactive power and to maintain transmission voltages within specific limits.

"Regulation and Frequency Response Service" (an Ancillary Service) is the continuous balancing of generation and interchange resources accomplished by raising or lowering the output of on-line generation as necessary to follow the moment-by-moment changes in load and to maintain frequency within a Control Area.

"Spinning Operating Reserve Service" (an Ancillary Service) maintains generating units on-line, but loaded at less than maximum output, which may be used to service load immediately when disturbance conditions are experienced due to a sudden loss of generation or load.

"Supplemental Operating Reserve Service" (an Ancillary Service) provides an additional amount of operating reserve sufficient to reduce Area Control Error to zero within 10 minutes following loss of generating capacity which would result from the most severe single contingency.

"Energy Imbalance Service" (an Ancillary Service) corrects for differences over a period of time between schedules and actual hourly deliveries of energy to a load. Energy delivered or received within the authorized bandwidth (defined below) for this service is accounted for as an inadvertent flow and is returned to the providing party by the receiving party in accordance with standard utility practice.

Energy Associated with Hydro Peaking Power:

PEAKING ENERGY:

1,200 kilowatthours of Peaking Energy per kilowatt of Peaking Contract Demand will be furnished during each contract year.

SUPPLEMENTAL PEAKING ENERGY:

Supplemental Peaking Energy (in addition to Peaking Energy) will be furnished if and when determined by Southwestern to be available, to be provided at rates of delivery which do not exceed the Power Customer's Peaking Contract Demand.

Monthly Rates for Peaking Contract Demand:

CAPACITY CHARGE FOR HYDRO PEAKING POWER:

$2.56 per kilowatt of Peaking Billing Demand.

Services Associated with Capacity Charge for Hydro Peaking Power

The capacity charge for Hydro Peaking Power includes such transmission services as are necessary to integrate Southwestern's resources in order to reliably deliver Hydro Peaking Power and associated energy to Power Customers. This capacity charge also includes Scheduling, System Control, and Dispatch Service and Reactive Supply and Voltage Control from Generation Sources Service.

Secondary Transmission Service under Capacity Associated with Hydro Peaking Power

Power Customers may utilize the capacity associated with Peaking Contract Demand for the transmission of non-Federal energy, on a non-firm, as-available basis, at no additional charge for such transmission service or associated Ancillary Services, under the following terms and conditions:

(1) the sum of the capacity, for any hour,which is used for Peaking Energy, Supplemental Peaking Energy, and Secondary Transmission Service, may not exceed the Peaking Contract Demand.;

(2 the non-Federal energy transmitted under such secondary service is delivered to the Power Customer's point of delivery for Hydro Peaking Power;

(3) the Power Customer pays for Real Power Losses associated with such deliveries of non-Federal energy; and

(4) Southwestern determines that sufficient transfer capability exists between the point of receipt into Southwestern's system of such non-Federal energy and the Power Customer's point of delivery for Hydro Peaking Power for the time period that such secondary transmission service is requested.

Rates for Energy Associated with Hydro Peaking Power:

ENERGY CHARGE:

(a) $0.0048 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0011 per kilowatthour of Peaking Energy delivered, as adjusted by the Administrator, Southwestern, in accordance with the procedure within this rate schedule. This adder does not apply to:

Supplemental Peaking Energy, or

Sales to any Power Customer which, by contract, has assumed the obligation to supply energy to fulfill the minimum of 1,200 kilowatthours of Peaking Energy per kilowatt of Peaking Contract Demand during a contract year (Contract Support Arrangements).

Energy Credit

During the six-month period from January 1, 1998 through June 30, 1998, a Power Customer-specific credit, as listed at the end of this rate schedule, will be applied to the monthly amounts due Southwestern by the listed Power Customers, in six approximately equal segments. However, the maximum applicable credit in any billing period, for any Power Customer, including any deferred credits, shall be limited to the total charges for all invoiced services to such customer during such billing period, with any excess to be deferred for application in succeeding billing periods.

Monthly Rates for Transformation Service:

CAPACITY CHARGES FOR TRANSFORMATION SERVICE:

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation for deliveries at voltages of 69 kilovolts or less from higher voltage facilities.

Application of Capacity Charges for Transformation Service

For any particular month, charges for transformation service will be assessed on the greater of (1) that month's actual peak demand, or (2) the highest peak demand recorded during the previous 11 months, at any point of delivery. For the purpose of this Rate Schedule P-98, the peak demand will be based on all deliveries, of both Federal and non-Federal energy, from the system of Southwestern, at such point during such month.

Monthly Rates for Ancillary Services:

CAPACITY CHARGES FOR ANCILLARY SERVICES:

(a) Regulation and Frequency Response Service
$0.04 per kilowatt of Peaking Billing Demand

(b) Operating Reserves Service: Spinning Reserve
$0.03 per kilowatt of Peaking Billing Demand

(c) Operating Reserves Service: Supplementary Reserve
$0.03 per kilowatt of Peaking Billing Demand

(d) Energy Imbalance Service:
no monthly charge

Availability of Ancillary Services

Services (a) through (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services available for such deliveries, provided either by Southwestern or from other resources.

Application of Ancillary Services Charges

For any month, the charges for Ancillary Services shall be based on Peaking Billing Demand.

Determination of Ancillary Services to Be Charged to a Power Customer

Power Customers located in Southwestern's Control Area must inform Southwestern by written notice of the Ancillary Services which they intend to take from Southwestern, or of their election to provide all or part of such Ancillary Services from their own resources or from a third party, subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical requirements for delivery.

Such written notice shall specify the Ancillary Services to be provided by Southwestern, or from other resources, for each point of delivery. The sources for the Ancillary Services which a Power Customer has elected to take in association with any particular point of delivery may not be changed during any calendar month. Power Customers may change the Ancillary Services which they take from Southwestern, and/or the sources from which they receive such services, by written notice provided at least 15 days prior to the first day of the month in which such changes are to be effected.

Limitations on Energy Imbalance Service

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ±2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth which involve the delivery of Hydro Peaking Power, and which occur because the Power Customer has underscheduled resources to meet load, are subject to a Capacity Overrun Penalty.

Application of Capacity Overrun Penalty

Power Customers which receive deliveries within Southwestern's Control Area are obligated by contract to provide resources, over and above the Hydro Peaking Power and associated energy purchased from Southwestern, sufficient to meet their loads. Such Power Customers are subject to a Capacity Overrun Penalty only when the formulas provided in their contracts indicate an overrun on Hydro Peaking Power, and investigation determines that all resources, both firm and non-firm, which were available at the time of the apparent overrun were insufficient to meet load within the authorized bandwidth for Energy Imbalance Service.

CAPACITY OVERRUN PENALTY

For each hour in which energy flows outside the authorized bandwidth, the Power Customer will be obliged to purchase such energy at the following rates:

Range of Deviation Outside of Authorized Bandwidth	Rate per Kilowatthour
From 1 to 2,000 kilowatts:	$0.05
For 2,001 kilowatts and greater:	$0.10

Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources

When a Power Customer schedules greater resources than are needed to meet its load, and energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Power Customers whose resources are scheduled by Southwestern are not subject to this provision.

Application of Energy Overrun Penalty:

By contract, the Power Customer is subject to limitations on the maximum amounts of Peaking Energy which may be scheduled during any month or during any four consecutive months. When the Power Customer schedules amount in excess of such maximum amounts for any month, or schedules more than 1,200 hours of Peaking Energy per kilowatt of Peaking Contract Demand in any contract year, such Power Customer is subject to the Energy Overrun Penalty.

ENERGY OVERRUN PENALTY:

For each kilowatthour of overrun: $0.053 per kilowatthour

Rates for Real Power Losses

Real Power Losses are computed as 4 percent of the total amount of non-Federal energy transmitted under a particular Power Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed as follows:

MC = .04 x NFE x PPUC

with the factors defined as follows:

MC = The monthly charge by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy transmitted under a Power Customer's Peaking Contract Demand during a particular month; and

PPUC = Purchased Power Unit Cost for Real Power Losses during the applicable Fiscal Year (October 1 through September 30) in mills per kilowatthour in accordance with the following formula:

$$PPUC = PFY \times \left(\mathbf{s}\overline{(FUT/PFY)^{1/n}}\right) \times GDP \times 1.1$$

with the factors defined as follows:

PFY = cost for energy during the previous Fiscal Year, as set forth in the most recently available Energy Information Administration (EIA) Publication for the previous Fiscal Year, for Southwestern's marketing area;

FUT = cost for energy projected "n" years into the future from the previous Fiscal Year as set forth in the EIA Publication for that previous Fiscal Year, for Southwestern's marketing area;

n = number of years from the previous Fiscal Year that the EIA Publication for the previous Fiscal Year projects FUT;

GDP = The Administrations' Gross Domestic Product Price Index, as cited in the most recent Presidential Budget of the United States.; and

1.1 = a factor representing power suppliers' administrative costs

The PPUC rate is adjusted at the beginning of each Fiscal Year, and will be published on Southwestern's Open Access Same-Time Information Service. For Fiscal Year 1998, the PPUC rate of 20.8 mills per kilowatthour ($0.0208) has been established.

Requirements Related to Power Factor

Any Power Customer served from facilities owned by or available by contract to Southwestern will be required to maintain a power factor of not less than 95 percent lagging for each electrically integrated load except where point(s) are point(s) of system integration for mutual system support.

Determination of Power Factor

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div \mathbf{s}\,(kWh^2 + rkVAh^2) \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Power Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Power Customer's electrically integrated load through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

Power Factor Penalty

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

$$PENALTY = PD \times PFP \times \$1.00$$

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Power Customer as the Power Factor Penalty.

PD = The Power Customer's peak demand in kilowatts at the point or points of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

Application of Power Factor Penalty

No penalty is assessed for leading power factor. Southwestern, at its sole option, may determine whether power factor calculations should be applied to a single physical point of delivery or to multiple physical points where a Power Customer has a single, electrically integrated load served through multiple points. The general criteria for such decision shall be that, given the configuration of the Power Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment, whether the power factor computation

more accurately assesses the detrimental impact on Southwestern's system when the above formula is calculated for a single physical point of delivery or for a combination of physical points.

Southwestern, at its sole option, may waive power factor penalties when, in Southwestern's sole judgment, low power factor conditions were not detrimental to the system of Southwestern due to particular loading and voltage conditions at the time power factor dropped below 95 percent lagging.

Adjustment for Reduction in Service:

If, during any month, the quantity of Peaking Contract Demand scheduled by the customer for delivery is reduced by Southwestern for a period or periods of not less than two consecutive hours by reason of an outage caused by either an uncontrollable force or by the installation, maintenance, replacement or malfunction of transmission and/or related facilities on the system of Southwestern, the Power Customer's capacity charges for such month will be reduced for each such reduction in service by an amount computed under the formula:

$$R = (C \times K \times H) \div S$$

with the factors defined as follows:

R = the dollar amount of reduction in the monthly total capacity charges for a particular reduction of not less than two consecutive hours during any month, except that the total amount of any such reduction shall not exceed the product of the Power Customer's capacity charges associated with Hydro Peaking Power times the Peaking Billing Demand.

C = the Power Customer's capacity charges associated with Hydro Peaking Power for the Peaking Billing Demand for such month.

K = the reduction in kilowatts in Peaking Billing Demand for a particular event.

H = the number of hours duration of such particular reduction.

S = the number of hours that Peaking Energy is scheduled during such month, but not less than 60 hours times the Peaking Contract Demand.

Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment

On the effective date of this Rate Schedule P-98, the cumulative discretionary adjustment of -$0.0031 (a credit) per kilowatthour will be applied to the Purchased Power Adder referenced above under part (b) of the Energy Charge. This initial adjustment reflects the existing Purchased Power Deferral Account balance, and will be applied to each kilowatthour of Peaking Energy purchased by the Power Customer for service received after the said effective date. The Purchased Power Deferral Account balance is the result of Purchased Power Adder receipts collected under previous rate schedules.

Subsequently, no oftener than once annually, the Purchased Power Adder may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 per kilowatthour, as calculated by the following formula:

$$ADJ = (PURCH - EST - DIF) \div SALES$$

with the factors defined as follows:

ADJ = the dollar amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest $.0001 per kilowatthour, provided that the total ADJ to be applied in any year shall not vary from the then-effective Net Purchased Power Adder by more than $.0011 per kilowatthour;

PURCH = the actual total dollar cost of Southwestern's System Direct Purchases as accounted for in the financial records of the Southwestern Federal Power System for the period;

EST = the estimated total dollar cost ($2,563,300 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0011 per kilowatthour of Peaking Energy;

DIF = the accumulated remainder of the difference in the actual and estimated (PURCH - EST) total dollar cost of Southwestern's System Direct Purchases since the effective date of the currently approved Purchased Power Adder set forth in this rate schedule, which remainder is not projected for recovery through the Purchased Power Adder Adjustment in any previous periods;

SALES = the annual Total Peaking Energy sales projected to be delivered (2,240,300,000 KWh per year) from the Southwestern System, which total was used as the basis for the $.0011 per kilowatthour Purchased Power Adder.

Power Customer-Specific Purchased Power Adder Credit:

Customer	Total Credit ($)
Anthony, Kansas	809
Arkansas Electric Cooperative Corporation	228,933
Augusta, Arkansas	3,838
Bentonville, Arkansas	21,847
Brazos Electric Power Cooperative	180,112
Cajun Electric Power Cooperative	60,194
Carthage, Missouri	8,518
Clarksville, Arkansas	23,117
Coffeyville, Kansas	1,915
Comanche, Oklahoma	5,689

Customer	Total Credit ($)
Copan, Oklahoma	3,818
Duncan, Oklahoma	49,527
Eldorado, Oklahoma	2,421
Fort Sill, Oklahoma	31,931
Fulton, Missouri	22,727
Goltry, Oklahoma	1,816
Granite, Oklahoma	3,894
Hermann, Missouri	7,008
Higginsville, Missouri	3,646
Hominy, Oklahoma	15,240
Jonesboro, Arkansas	425,049
Kansas City, Kansas	39,805
Kansas Electric Power Cooperative	0
Kansas Municipal Energy Agency	11,305
Kaw Valley Electric Cooperative	846
Kennett, Missouri	21,481
Lafayette, Louisiana	8,820
Lamar, Missouri	106,342
Lexington, Oklahoma	6,194
Louisiana Energy and Power Authority	9,442
Malden, Missouri	4,233
Manitou, Oklahoma	1,399
McAlester Army Ammunition Plant	1,871
Minden, Louisiana	782
Natchitoches, Louisiana	1,224
New Madrid, Missouri	32,359
Nixa, Missouri	31,083
Northeast Texas Electric Cooperative	206,523
Olustee, Oklahoma	356
Paragould, Arkansas	307,807
Paris, Arkansas	12,996
Piggott, Arkansas	26,546
Poplar Bluff, Missouri	316,093
Purcell, Oklahoma	14,972
Rayburn Country Electric Cooperative	0
Ryan, Oklahoma	3,217
Sikeston, Missouri	142,778
Skiatook, Oklahoma	13,306
Spiro, Oklahoma	6,745
Springfield, Missouri	60,746
Tex-La Electric Cooperative of Texas	4,526
Thayer, Missouri	3,880
Vance Air Force Base, Oklahoma	4,371
Walters, Oklahoma	9,753
West Plains, Missouri	165,170
Western Farmers Electric Cooperative	315,379

Wetumka, Oklahoma	3,532
Yale, Oklahoma	4,974